THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Algorithms

CSE 6331

Credit Hours:
3.00 - 3.00

Course Levels:
Graduate (5000-8000 level)

Course Components:
Lecture

Course Description:
Algorithm design paradigms; mathematical analysis of algorithms.

Prerequisites and Co-requisites:
Prereq: 2331 (680) or 5331.

Course Goals / Objectives:
- Master designing graph algorithms
- Be familiar with various algorithm design techniques, such as greedy, divide-and-conquer, dynamic programming, backtracking, and randomized algorithms
- Be exposed to linear programming algorithms and applications
- Be exposed to computational geometry

Course Topics:
- Greedy algorithms.
- Divide-and-conquer algorithms.
- Dynamic programming algorithms.
- Graph algorithms, backtracking.
- Randomized algorithms.
- Linear programming algorithms and applications.
- Computational geometry.

Designation:
Elective